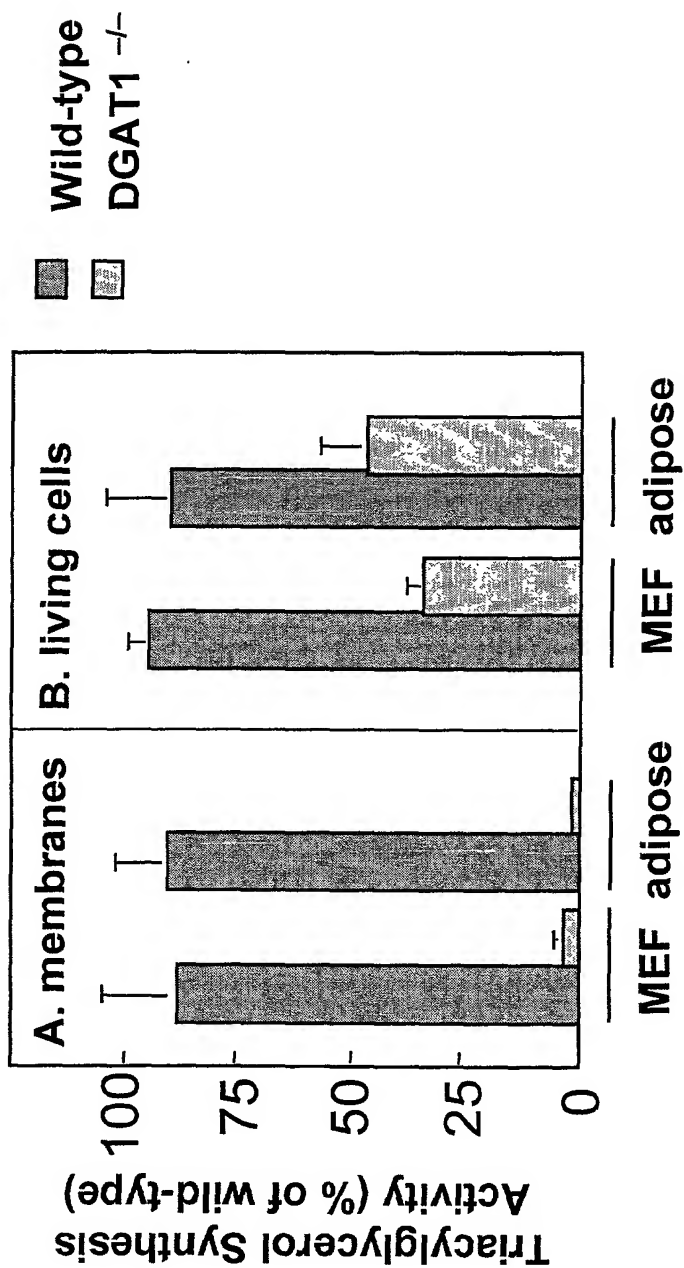


FIG. 1



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Filed: 1/14/02  
For: "Mono- and Diacylglycerol Acyltransferases  
and Methods of Use Thereof"  
(19) Drawing pages

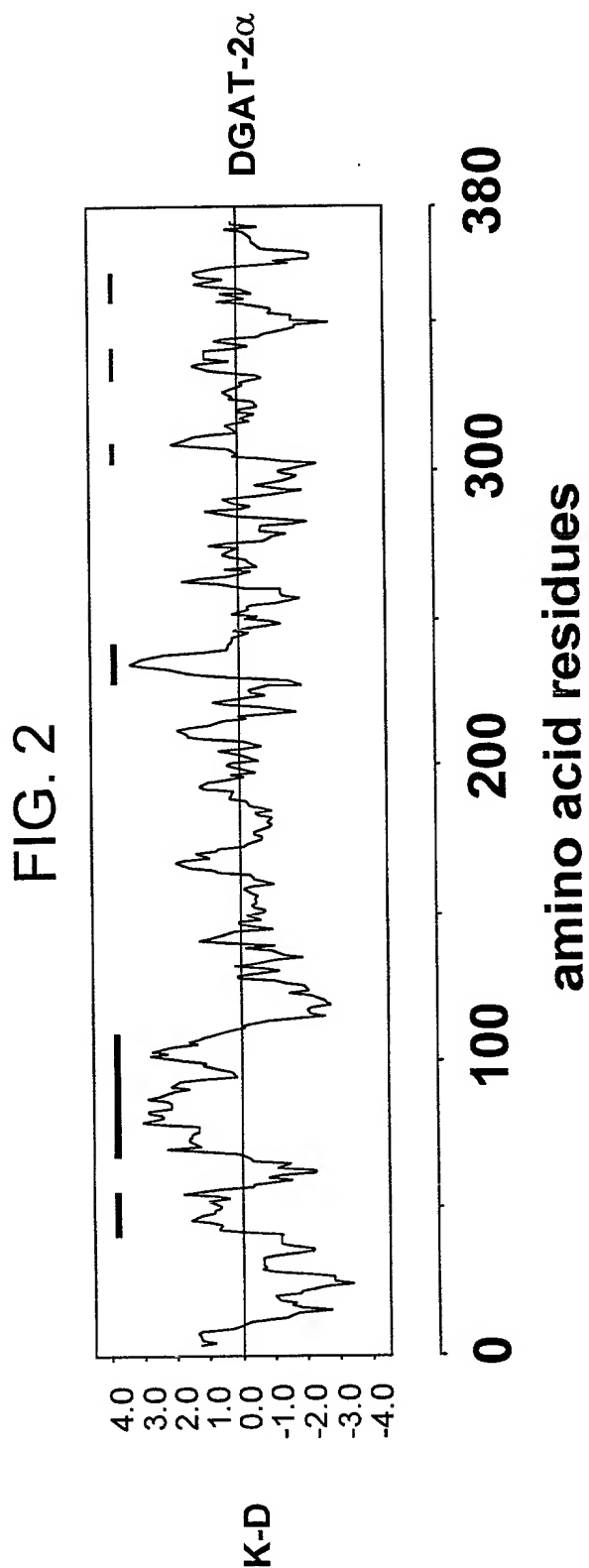
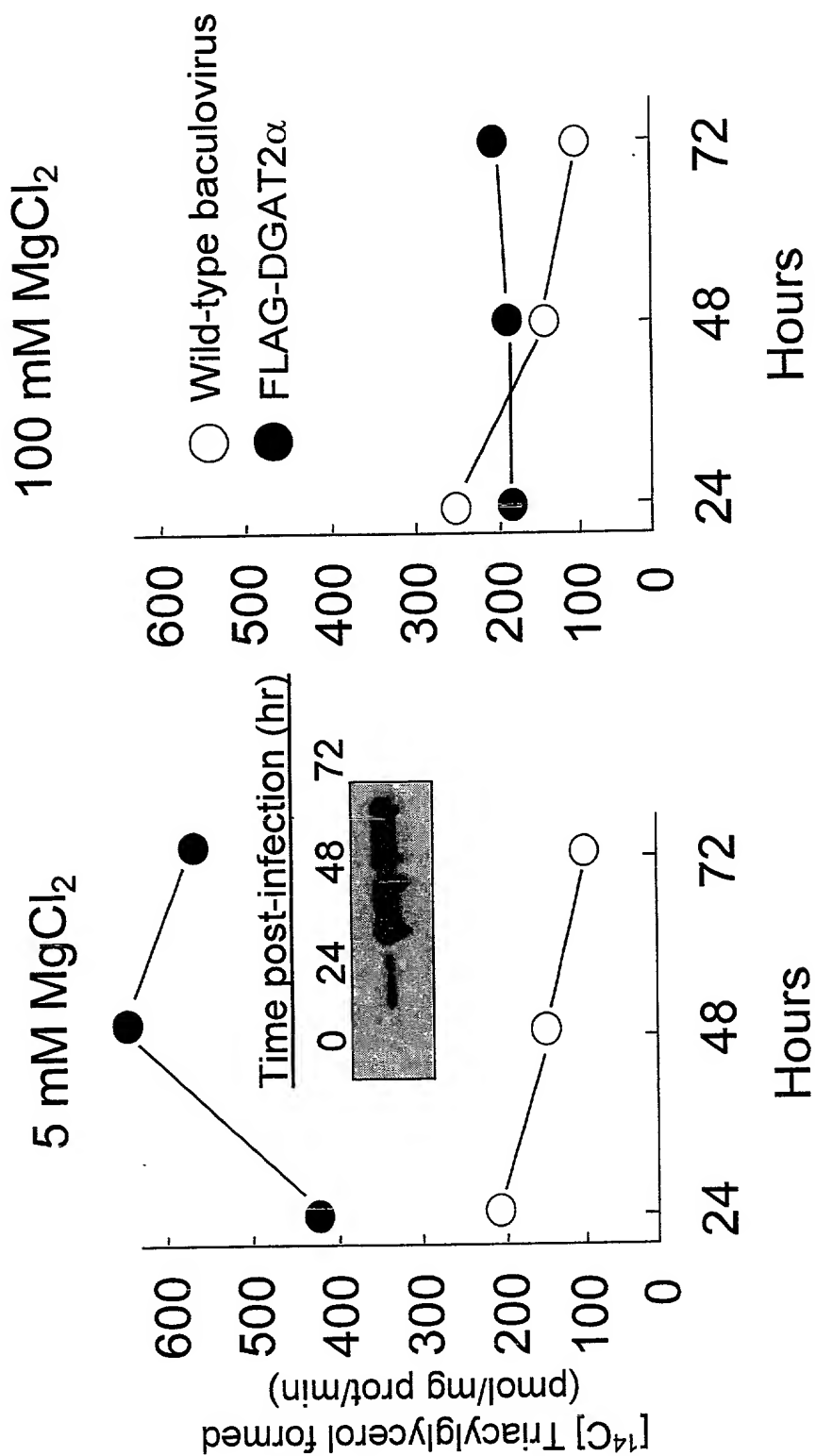
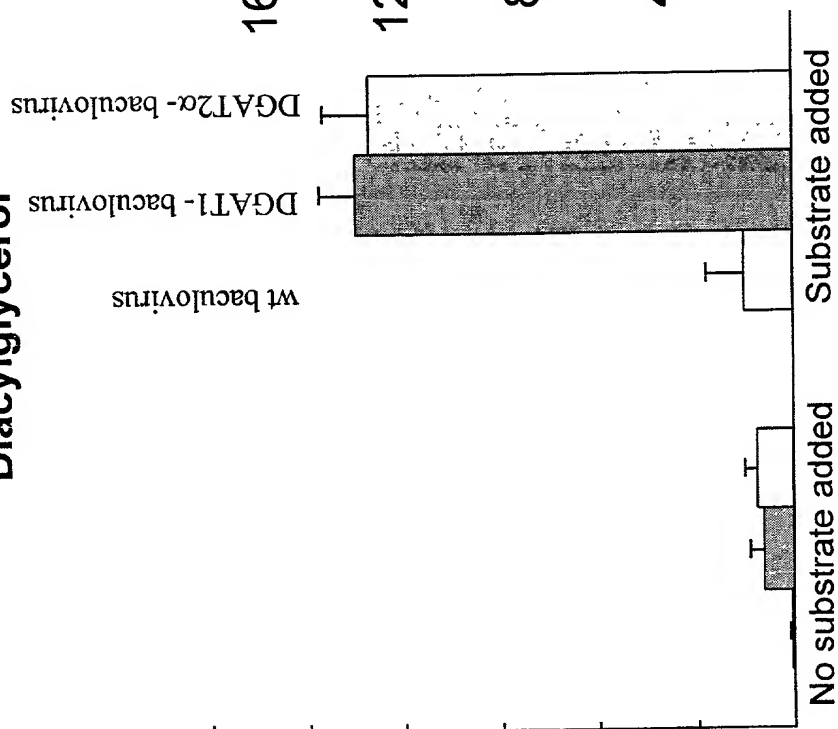


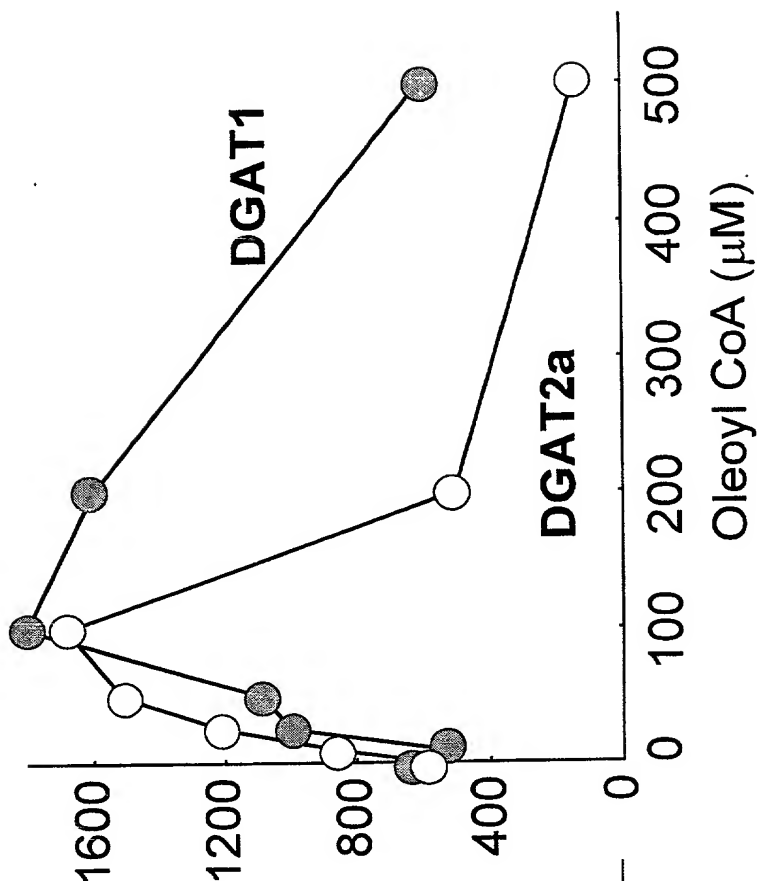
FIG. 3A



**FIG. 3B**  
**B. DGAT2 $\alpha$  activity as a function of**  
**Diacylglycerol**



**FIG. 3C**  
**C. DGAT2 $\alpha$  activity as a function of**  
**Oleoyl Coenzyme A**



**FIG. 4**  
**A. Tissue distribution of human DGAT2 $\alpha$**

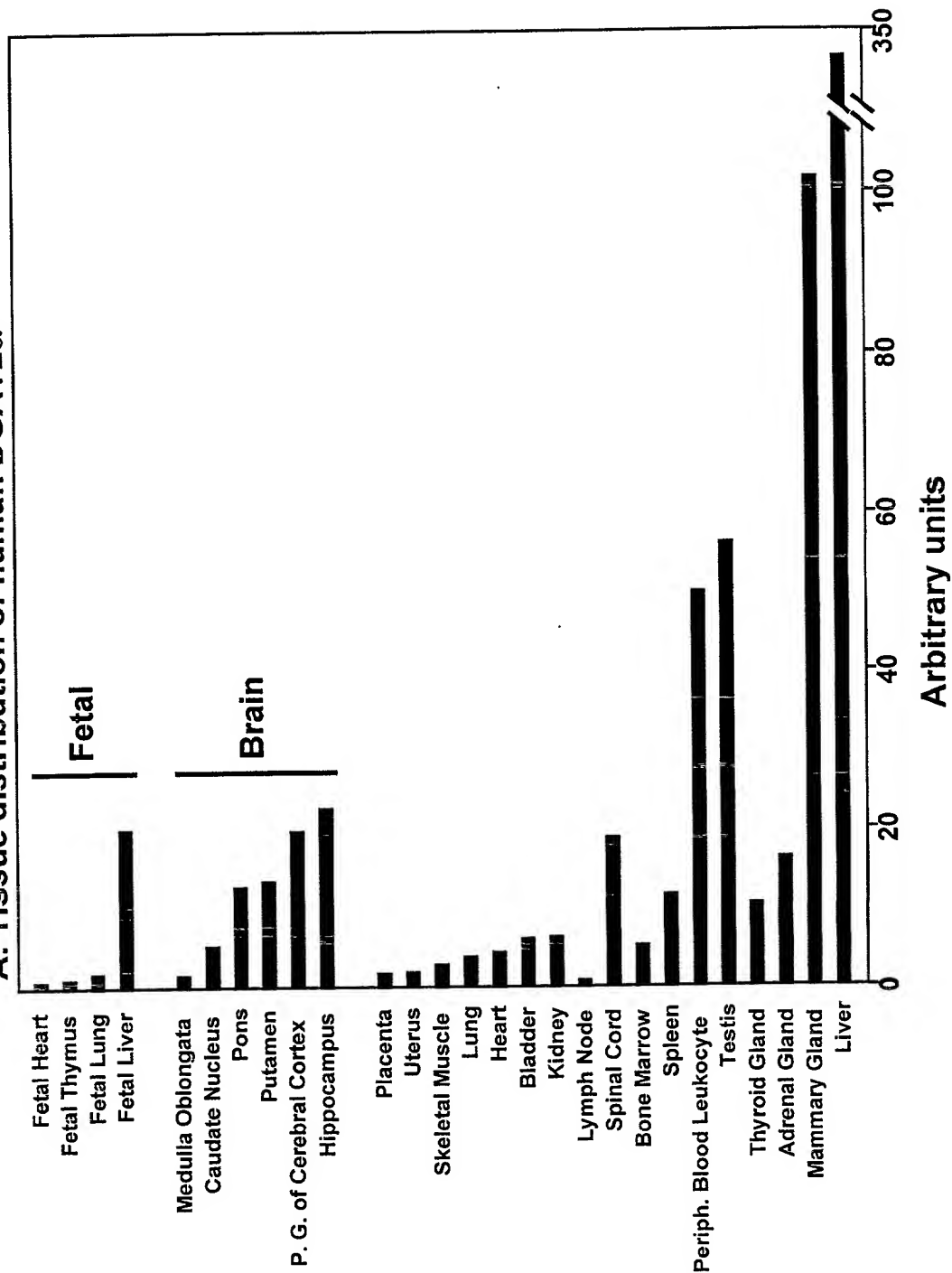
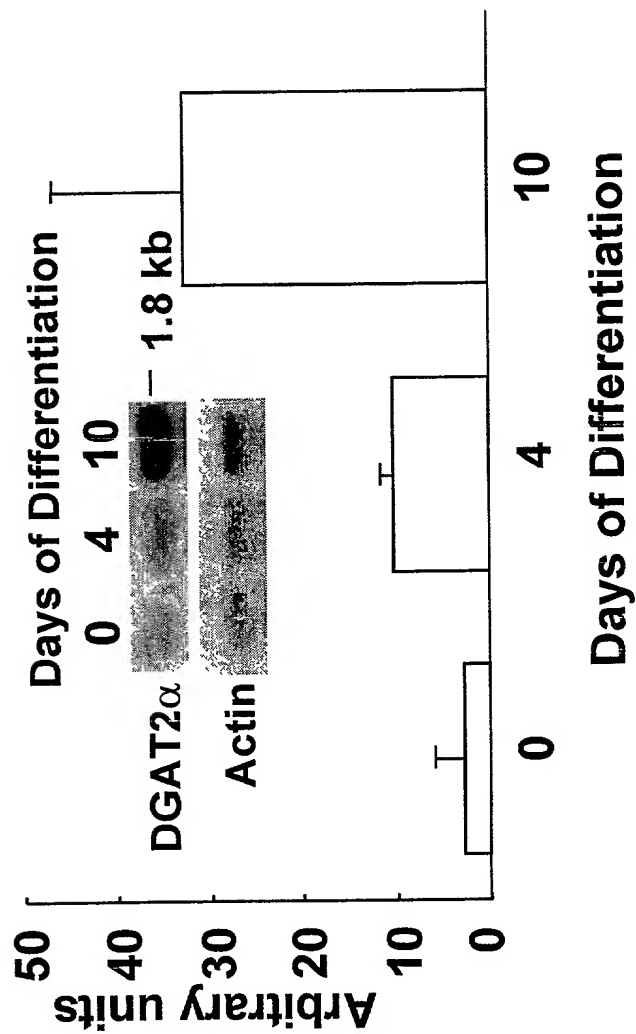


FIG. 5



## FIG. 6A

### Mouse DGAT2 $\alpha$ amino acid sequence

MKTLIAAYSGVLRGERRAELPAAKNKNKGSALSREGSGRWGTGSSILSALQDIFSVTLNRSKVEKQLQV  
ISVLQWVLSFLVLGVACSVILMYTFCTDCWLIAVLYFTWLAFDWNTPKKGGRRSQWVRNWAVWRYFRDYF  
PIQLVKTHNLLTTRNYIFGYHPHGIMGLGAFCNFSTEATEVSKKFPGIRPYLATLAGNFRMPVLRREYLM  
GGICLVNRDTIDYLLSKNGSGNAIIIVVGGAESLSSMPGKNAVTLKNRKGFKLALRHGADLVPTYSFG  
ENEVYKQVIFEESWGRWVKKFQKYIGFAPCI FHGRGLFSSDTWGLVPYSKPITTVVGEPI TVPKLEHPT  
QKDIDLYHAMYMEALVKLFDNHKTKFGLPETEVLEV N (SEQ ID NO:04)

## FIG. 6B

### Mouse DGAT2 $\alpha$ nucleic acid sequence

ATGAAGACCCTCATCGCCGCCTACTCCGGGGTCTCGCGGGTGAGCGTCGGGCGGAAGCTGCCCCGAGCGAA  
AACAAGAATAAAGGATCTGCCCTGTACGCGAGGGGTCTGGGCGATGGGGCACTGGCTCCAGCATCCTCTCA  
GCCCTCCAAGACATCTTCTGTGTCACCTGGCTCAACAGATCYAAGGTGGAAAAACAGCTGCAGGTCATCTCA  
GTACTACAATGGGTCTATCCTTCCTGGTGCTAGGAGTGGCCTGCAGTGTATCCTCATGTACACCTTCTGC  
ACAGACTGCTGGCTGATAGCTGTGCTCTACTTCACCTGGCTGGCATTGACTGGAACACGCCCAAGAAAGGT  
GGCAGGAGATCGCAGTGGGTGCGAAACTGGGCGGTGTGGCGCTACTTCCGAGACTACTTCCCATCCAGCTG  
GTGAAGACACACAACCTGCTGACCACCAGGAACATATATCTTTGGATACCACCCCATGGCATCATGGGCCTG  
GGTGCCCTTCTGTAACCTCAGCACAGAGGCTACTGAAGTCAGCAAGAAGTTTCTGGCATAAGGCCCTATTTG  
GCTACGTTGGCYGGTAACCTCCGGATGCCTGTGCTTCGCGAGTACCTGATGTCTGGAGGCATCTGCCCTGTC  
AACCGAGACACCATAGACTACTTGCTCTCCAAGAATGGGAGTGGCAATGCTATCATCATCGTGGTGGGAGGT  
GCAGCTGAGTCCCTGAGCTCCATGCCTGGCAAGAACGCAGTCACCCTGAAGAACCGCAAAGGCTTTGTGAAG  
CTGGCCCTGCGCCATGGAGCTGATCTGGTTCACCTTATTCCTTTGGAGAGAATGAGGTATACAAGCAGGTG  
ATCTTTGAGGAGGGTTCTGGGGCCGATGGGTCCAGAAGAAGTTCCAGAAGTATATTGGTTTCGCCCCCTGC  
ATCTTCCATGGCCGAGGCCTCTTCTCCTCTGACACCTGGGGGCTGGTGCCCTACTCCAAGCCCATCACCACC  
GTCGTGGGGGAGCCCATCACTGTCCCCAAGCTGGAGCACCCGACCCAGAAAGACATCGACCTGTACCATGCC  
ATGTACATGGAGGCCCTGGTGAAGCTCTTTGACAATCACAAGACCAAATTTGGCCTNCCAGAGACTGAGGTG  
CTGGAGGTGAACTGA (SEQ ID NO:03)

## FIG. 7A

### Human DAGT2 $\alpha$ amino acid sequence

MKTLIAAYSGVLRGERQAEADRSQRSHGGPALSREGSGRWGTGSSILSALQDLFSVTWLNRSKVEKQLQV  
ISVLQWVLSFLVLGVACSAILMYIFCTDCWLIADVLYFTWLVFDWNTPKKGRRSQVVRNWAVWRYFRDYF  
PIQLVKTHNLLTTRNYIFGYHPHGIMGLGAFCNFSTEATEVSKKFPGIRPYLATLAGNFRMPVLRREYLM  
GGICPVSRDTIDYLLSKNGSGNAIIIVVGAAESLSSMPGKNAVTLNRKGFVKLALRHGADLVPIYSFG  
ENEVYKQVIFEEGSGWRWVQKKFQKYIGFAPCIFHGRGLFSSDTWGLVPYSKPITTTVVGEPITIPKLEHP  
TQQDIDLYHTMYMEALVKLFDKHKTKFGLPETEVLEV N (SEQ ID NO:02)

## FIG. 7B

### Human DAGT2 $\alpha$ nucleic acid sequence

TTCAGCCATGAAGACCCTCATAGCCGCCTACTCCGGGGTCTCGCGCGGAGCGTCAGGCCGAGGCTGACCG  
GAGCCAGCGCTCTCACGGAGGACCCGTGTGCGCGGAGGGGTCTGGGAGATGGGGCACTGGATCCAGCATCCT  
CTCCGCCCTCCAGGACCTCTTCTGTGTCACCTGGCTCAATAGGTCCAAGGTGGAAAAGCAGCTACAGGTCAT  
CTCAGTGCTCCAGTGGGTCTGTCTTCTTGTACTGGGAGTGGCCTGCAGTGCCATCCTCATGTACATATT  
CTGCACTGATTGCTGGCTCATCGCTGTGCTCTACTTCACTTGGCTGGTGTGTTGACTGGAACACACCCAAGAA  
AGGTGGCAGGAGGTACAGTGGGTCCGAACTGGGCTGTGTGGCGCTACTTTGAGACTACTTTCCCATCCA  
GCTGGTGAAGACACACAACCTGCTGACCACCAGGAAGTATATCTTTGGATACACCCCCATGGTATCATGGG  
CCTGGGTGCCTTCTGCAACTTCAGCACAGAGGCCACAGAAGTGAGCAAGAAGTTCCCAGGCATACGGCCTTA  
CCTGGCTACACTGGCAGGCAACTTCCGAATGCCTGTGTTGAGGGAGTACCTGATGTCTGGAGGTATCTGCCC  
TGTCAGCCGGGACACCATAGACTATTTGCTTTCAAAGAATGGGAGTGGCAATGCTATCATCATCGTGGTCCG  
GGGTGCGGCTGAGTCTCTGAGCTCCATGCCTGGCAAGAATGCAGTCACCCTGCGGAACCGCAAGGGCTTTGT  
GAAACTGGCCCTGCGTCATGGAGCTGACCTGGTTCCTATCTACTCCTTTGGAGAGAATGAAGTGTACAAGCA  
GGTGATCTTCGAGGAGGGCTCCTGGGGCCGATGGGTCCAGAAGAAGTTCCAGAAATACATTGGTTTCGCCCC  
ATGCATCTTCCATGGTTCGAGGCCCTCTTCTCCTCCGACACCTGGGGGCTGGTGCCCTACTCCAAGCCCATCAC  
CACTGTTGTGGGAGAGCCCATCACCATCCCCAAGCTGGAGACCCAACCCAGCAAGACATCGACCTGTACCA  
CACCATGTACATGGAGGCCCTGGTGAAGCTCTTCGACAAGCACAAAGACCAAGTTTCGGCCTCCCGGAGACTGA  
GGTCCTGGAGGTGAAGTGAAGCCTTCGGGGCCAATTCCTGGAGGAACCCAGCTGCAAACTACTTTTTTGT  
CTCTGTA (SEQ ID NO:01)

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## FIG. 8A

### Mouse DC2 amino acid sequence

MMVEFAPLNTPLARCLQTA AVLQWVLSFLLLVQVCIGIMVMLVLYNYWFLYIPYLVWFYDWRTP EQGGR  
RWNWVQSWPVWKYFKEYFPICLVKTQDLDPGHNYIFGFHPHGIFVPGA FGNFCTKYSDFKKLFPGFTSYL  
HVAKIWFCFPLFREYLM SNGPVSVSKESSLHVL SKDGGGNVSIIVLGGAKEALEAHPGTFTLCIRQRKGF  
VKMALTHGASLVPVFSFGENDLYKQINNPKGSWLR TIQDAMYDSMGVALPLIYARGIFQHYFGIMPYRKL  
IYTVVGRPIPVQQILNPTSEQIEELHQTYLEELKKLFNEHKGKYGIPEHETLVFK (SEQ ID NO:06)

### Mouse DC2 nucleic acid sequence

ATGATGGTGCAGTTTCGCGCCACTCAACACCCCGCTGGCACGGTGCCTACAGACCGCTGCGGTGCTGCAGTGG  
GTCTGTCTCTTCTCTCTGCTCGTGCAGGTGTGCATTGGAATTATGGTGATGCTGGTCTGTACA ACTATTGG  
TTCTTTTACATCCCATATCTGGTCTGGTTTTACTATGACTGGAGAACCCAGAGCAAGGAGGCAGAAGATGG  
AACTGGGTCAAAGCTGGCCTGTGTGGAAGTATTTTAAGGAGTATTTTCCAATCTGTCTTGTCAAACGCAG  
GATTGGATCCGGGTACAATTATATATTTGGGTTTACCCTCATGGAATATTCGTGCCTGGAGCCTTTGGA  
AATTTTGTACAAAATACTCGGACTTCAAGAAGCTATTTCTGGCTTTACATCGTATCTCCACGTGGCCAAG  
ATCTGGTTCTGTTTCCCGTTGTTCCGAGAATATCTGATGAGTAACGGGCCGGTTTCAGTGTCTAAGGAGAGT  
TTGTCTCATGTGCTGAGCAAGGATGGAGGTGGCAATGTCTCAATCATTGTCTCCTCGGAGGTGCAAAGGAGCG  
CTGGAGGCTCACCCAGGAACATTCACCCTGTGCATCCGCCAGCGCAAAGGGTTTGTTAAGATGGCCTTGACC  
CATGGTGCCAGTTTGGTTCCAGTATTTTCTTTTGGTGAAAATGATCTATATAAGCAAATTAACAACCCCAA  
GGCTCCTGGCTACGAATAACAAGACGCAATGTATGATTCAATGGGAGTAGCCTTGCCACTGATATATGCC  
AGAGGAATTTTCCAGCACTACTTTGGCATAATGCCCTATCGGAAGCTGATCTACACTGTTGTTGGCCGCCCT  
ATCCCTGTTTCCAGCAGATTCTGAACCCGACCTCAGAGCAGATTGAAGAGCTGCATCAGACATACCTAGAGGAG  
CTAAAGAACTATTCAATGAACACAAAGGGAAATATGGGATTCCGGAGCACGAACTCTGGTATTTAAATAA  
(SEQ ID NO:05)

### Human DC2 amino acid sequence

MKVEFAPLNIQLARRLQTVAVLQWVLSFLTGPMSIGITVMLIIHNYLFLYIPYLMWLYFDWHTPERGGRR  
SSWIKNWTLWKHFKDYFPIHLIKTQDLDP SHNYIFGFHPHGIMAVGAFGNFSVNYSDFKDLFPGFTSYLH  
VLPLWFWCPVFREYVMSVGLVSVSKSVSYMVSKEGGNISVIVLGGAKESLDAHPGKFTLFI RQRKGFV  
KIALTHGASLVPVVSFGENELFKQTDNPEG SWIRTVQNKLQKIMGFALPLFHARGVFQYNFGLMTYRKAI  
HTVVGRPIPVQRQTLNPTQEQIEELHQTYMEELRKLFEHKGKYGIPEHETLVLK (SEQ ID NO:08)

### Human DC2 nucleic acid sequence

CGTGGGTGCAGGCTGCAGTGGCTGGCGCCGTCTCGCCCGCCAGGCCATGAAGGTAGAGTTTGCACCGCTC  
AACATCCAGCTGGCGCGCGCGCTGCAGACGGTGGCCGTGCTGCAGTGGGTCTTTTCTTTTCTTACAGGGCCG  
ATGTCCATTGGAATCACTGTGATGCTGATCATACACAACTATTTGTTCTTTTACATCCCTTATTTGATGTGG  
CTTTACTTTGACTGGCATAACCCAGAGCGAGGAGGCAGGAGATCCAGCTGGATCAAAAATTGGACTCTTTGG  
AAACACTTTAAGGACTATTTTCCAATTCATCTTATCAAACTCAAGATTTGGATCCAAGTCACA ACTATATA  
TTTGGGTTTCAACCCCATGGAATAATGGCAGTTGGAGCCTTTGGGAATTTTCTGTAAATTATTCTGACTTC  
AAGGACCTGTTTCTGGCTTTACTTCATATCTTCACGTGCTGCCACTTTGGTTCTGGTGTCTGTCTTTCGA  
GAATATGTGATGAGTGTGGGCTGGTTTCAGTTTCCAAGAAAAGTGTGTCTCTACATGGTAAGCAAGGAGGGA  
GGTGGAACATCTCTGTATTGTCCTTGGGGGTGCAAAAGAATCACTGGATGCTCATCTGGAAAGTTCACT  
CTGTTTCATCCGCCAGCGGAAAGGATTTGTTAAATTTGCTTTGACCATGGCGCCTCTCTGGTCCCAGTGGTT  
TCTTTTGGTGAAAATGAACTGTTTAAACAACTGACAACCTGAAGGATCATGGATTAGA ACTGTTTCAAGAT  
AAACTGCAGAAGATCATGGGTTTGTCTTTGCCCTGTTTCATGCCAGGGAGTTTTTCA GTACAATTTTGGC  
CTAATGACCTATAGGAAAGCCATCCACACTGTTGTTGGCCGCCGATCCCTGTTCTGT CAGACTCTGAACCCG  
ACCCAGGAGCAGATTGAGGAGTTACATCAGACCTATATGGAGGAACCTAGGAAATGTTT GAGGAACACAAA

## FIG. 8B

**Mouse DC3 amino acid sequence** (partial sequence, about 100 amino acids gap in the center of the protein)

MKTEHLQSLSLQWPLSYVAMFWIVQPLLICLLFTPLWPLPTVYFVWLLLDWKTPDKGGRSDWVRNWNV  
WNHIRDYFPITILKTKDLSPSENYIMGVHPHGLLTFGAFCNFCTEATGFSKTFPGITPHLATLSWFFKIP  
IIRDYIMAKGLCSVSQASIDYLLSHGTGNLVGIPITVVGGEALPLPQVKNPSPEIVDKYHALYMDALYKL  
FEQHKVQYGCSTNTQKLIFL (SEQ ID NO:10)

**Mouse DC3 nucleic acid sequence** (partial sequence, about 100 amino acids gap in the center of the protein)

TTACCTCCCTCAGGGTCTGGGCATCATGTCTTGCTCTATGAAGACTGAACACTTACAGAGTCTGAGCCTTC  
TGCAGTGGCCCTTGAGCTACGTTGCCATGTTTTGGATTGTGCAGCCATTGTTAATTTGCCTATTGTTACAC  
CCTTGTGGCCGCTACCAACAGTTTACTTTGTCTGGTTACTTCTCGACTGGAAGACTCCAGATAAAGGTGGCA  
GGCGTTTCACTGGGTACGGAAGTGAATGTCTGGAACACATCAGGGACTATTTCCCATTAACAATCCTGA  
AGACTAAGGACCTGTACCTTCAGAGAACTACATCATGGGGTCCACCCCATNGGTCTCTGACCTTCGGTG  
CCTTCTGCAACTTCTGCACTGAGGCCACAGGCTTCTCGAAGACCTTCCAGGCATCACTCCTCACTTGGCCA  
CAC (SEQ ID NO:09)

**Human DC3 amino acid sequence**

MAFFSRLNLQEGQLQTFVFLQWIPVYIFLVWILQPLFVYLLFTSLWPLPVLYFAWLFLDWKTPERGGRSA  
WVRNWCWVTHIRDYFPITILKTKDLSPHNYLMGVHPHGLLTFGAFCNFCTEATGFSKTFPGITPHLATL  
SWFFKIPFVREYLMAGVCSVSQPAINYLLSHGTGNLVGIVGGVGEALQSVNNTTLILQKRKGFVRTA  
LQHGAYLVPSYSFGENEVFNQETFPEGTWLRLFQKTFQDTFKKILGLNFCTFHGRGFTRGSWGFPLPNRP  
ITTVVGEPLPIPRIKRPNQKTVDKYHALYISALRKLFDQHKVEYGLPETQELTIT (SEQ ID NO:12)

**Human DC3 nucleic acid sequence**

ATCAACTCAGCTTAAGAAGTTTTGGCCTTCTGGTTAGGCTTCTTGCCACAACAGAACAGCACCATAACCATG  
GCTTTCTTCTCCGACTGAATCTCCAGGAGGGCCTCCAAACCTTCTTTGTTTTGCAATGGATCCCAGTCTAT  
ATATTTTGTAGTTGGATCTTGCAGCCATTGTTTCGTCTACCTGCTGTTTACATCCTTGTGGCCGCTACCAGTG  
CTTTACTTTGCCTGGTTGTTTCCTGGACTGGAAGACCCAGAGCGAGGTGGCAGGCGTTCCGGCTGGGTAAGG  
AACTGGTGTGTCTGGACCCACATCAGGGACTATTTCCCATTAACGATCCTGAAGACAAAGGACCTATCACCT  
GAGCACAACTACCTCATGGGGGTTACCCCCATGGCCTCCTGACCTTTGGCGCCTTCTGCAACTTCTGCACT  
GAGGCCACAGGCTTCTCGAAGACCTTCCAGGCATCACTCCTCACTTGGCCACGCTGTCTGTTCTTCAAG  
ATCCCCTTTGTAGGGAGTACCTCATGGCCAAAGGTGTGTGCTCTGTGAGCCAGCCAGCCATCAACTATCTG  
CTGAGCCATGGCACTGGCAACCTCGTGGGCATTGTAGTGGGAGGTGTGGGTGAGGCCCTGCAAAGTGTGCCC  
AACACCACCACCTCATCTCCAGAAGCGCAAGGGGTTCTGTGCGCACAGCCCTCCAGCATGGGGCATACTT  
GTCCCTTCATATCTTTGGTGAGAACGAAGTTTTCAATCAGGAGACCTTCCCTGAGGGCACGTGGTTAAGG  
TTGTTCCAAAAACCTTCCAGGACACATTCAAAAAATCCTGGGACTAAATTTCTGTACCTTCCATGGCCGG  
GGCTTCACTCGCGGATCCTGGGGCTTCTGCCTTTCAATCGGCCCATTAACACTGTTGTTGGGGAACCCCTT  
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GAGCCACATTCCTTATGATCAACCCCAAGCCATGAGGGATCCAAGTAGAGCCACAGAAAAAGAAGATT  
CCAGGAGAGGGAAAGATCGTAAGGATGAGAGAGGAGACCATCCAAGCCAGAAATTATTTAATAAATCAGAGT  
TCTAGCAATAGAGTCC (SEQ ID NO:11)

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ACAATGCGAGGCAGTAGCCATGCCTGACAGCCACATGACAGATACTACACCGCTGAATGTGCTCTAACCCT  
GGACTTGGCATTGCCCCCTACTGTTGAGGAAGCAGTGCCTTTTTCTCCAGTCTTTTCAGGTCCCTTCACCAG  
GGAACCATTAACTTGTGCATCAGAAACAAGGACATTTCTTACATTTCTGCAAACACAGTCTCTTTTCAGTTT  
ACTCTTTTTTTTGGAGGGGGGGCGCGGGGAACGGAGTCTCGCTCTGTGCGCCAGGCTGGAGTGCAATGGTG  
CAATCTCAGCTCACTGCAACCTCTGCCTCCCAGGTCCAAGCGATTCTCCTGCCTCAGCCTCCCGGGTAGC  
CGGGACTACAGGCGCCTGCCACCACGCCCCGGCTAATTTTTTGTATTTTTTAGTAGAGACGAGGTTTCGCGCGT  
GTTGGCAGGCTGGTCTTGAACTCCTGACCTCAGGTGATTTACTCGCCTCGGCCTCCCAAAGTGCTGGGA  
TTACAGGCATGAGCCACTGTGCCAGTACACAAGTTTTTATTTTAGCCATTTTGATAAGTGTGAAGTTCCC  
TGATGGCTAATGATGTTCTCTTTTCCATGTGCTCATTGTGTCATCTATGCCAGAGAAGATTTGGAGAGGAG  
GACGTGAATTTGGAGGAAAACCTGTTCCAGGATTCCCCACCTCTGGTGGCCCCACCGTGGCTCACTGCCATT  
GACCACACTGCGAGGCAGAGCCTAGTGCAGTGTGAGCAGGGCCAGAGAGGAGAGGGCTTACAGTGTGA  
ATTCAGCTCAGCTGGGGAAGAAGACACCTTCCCTTCTAGACCTGAATCGGGTTTCCCAAGCAACCCTGTG  
ATTGCTGTCAACCTCTACCTGTGGTGGTGTTCACACCATACTGGCCTGTCACTGTGCTTATTTCTTACCTGGC  
TGGCTTTTTGACTGGAAGACCCCTCAGCGAGGCGGCGCCCGGTTTACCTGTGTGAGGCACCTGGCGCCTGTG  
GAAACACTACAGCGATTATTTCCCTCTCAAGCTTCTGAAGACTCATGACATCTGCCCCAGCCGCAACTAC  
ATCCTCGTCTGCCACCCTCATGGGCTCTTTGCCCATGGATGGTTTGGCCACTTTGCCACAGAGGCCTCAG  
GCTTCTCCAAGATATTTCTTGGCATCACCCCTTACATACTCAACTGGGAGCCTTTTTCTGGATGCCTTT  
CCTCAGAGAATATGTAATGTCTACAGGGGCTGCTCTGTGAGTGCATCCTCCATTGACTTTCTGCTGACT  
CATAAAGGCACAGGCAACATGGTCATTGTGGTGATTGGTGGACTGGCTGAGTGCAGATACAGCCTGCCAG  
GTTCTTCTACCTGGTGTGTAAGAACCGGTCTGGCTTTGTGCGCATGGCCCTTCAGCATGGGGTGCCTCT  
AATACCTGCCTATGCCTTTGGGGAGACGGACCTCTATGATCAGCACATTTTCACTCCTGGTGGCTTTGTG  
AACCGCTTCCAGAAGTGGTTCCAGAGCATGGTACACATCTACCTTTGTGCTTTCTATGGACGTGGCTTCA  
CCAAGAACTCCTGGGGCCTTCTGCCCCTATAGTCGGCCTGTAACCACCATCGTCGGGGAGCCTCTACCAAT  
GCCCAAGATTGAGAATCCAAGCCAGGAGATCGTGGCTAAATATCACACACTCTATATTGATGCCCTACGT  
AAACTGTTTGGACCAGCATAAGACCAAGTTTGGTATCTCAGAGACCCAGGAGCTGGAGATAATTTGACAGA  
CATCCCCAGTAGCCTTACCCTGGCTGGAAGGTATGGATGGACCCAGTGAGA (SEQ ID NO:013)

## FIG. 8D

### Human DC5 amino acid sequence

MVEFAPLFVPWERRRLQTLAVLQFVFSFLALGKICTVGFIALLFTRFWLLTVLYAAWWYLDLDRDKPRQGGRH  
IQAIRCWTIWKYMKDYFPIQLVKTAELDPSRNYIAGFHPHGVLAAGAFANLCTESTGFSSIFPGIRPHLM  
MLTLWFRAPFFRDYIMSAGLVTSEKESAAHILNRKGGGNLLGIIVGGAQEALDARPGSFLLLLNRKGFV  
RLALHTHGAFLVPIFSFGENDLFDQIPNSSGSWLRYIQNRLQKIMGISLPLFHGRGVFQYSFGLIPYRRPI  
TTVGKPIEVQKTLHPSEEEVNQLHQHYIKELCNLFEAHKLKFNIPADQHLEFC (SEQ ID NO:16)

### Human DC5 nucleic acid sequence

CCACAGCAGAGCTCACAGAACCTGCGGGAGCCAGGCTGACCCGCCAGCATGGTAGAGTTCGCGCCCTTGT  
GTGCCGTGGGAGCGCAGGCTGCAGACACTTGCTGTCTACAGTTTGTCTTCTCCTTCTTGCCACTGGGTAAG  
ATCTGCACTGTGGGCTTCATAGCCCTCCTGTTTACAAGATTCTGGCTCCTCACTGTCTGTATGCGGCCCTGG  
TGGTATCTGGACCGAGACAAGCCACGGCAGGGGGGCGGCACATCCAGGCCATCAGGTGCTGGACTATATGG  
AAGTACATGAAGGACTATTTCCCCATCCAGCTGGTCAAGACTGCTGAGCTGGACCCCTCTCGGAACCTACATT  
GCGGGCTTCCACCCCATGGAGTCTGCGAGTGGAGCCTTTGCCAACCTGTGCACTGAGAGCACAGGCTTC  
TCTTCGATCTTCCCCGGTATCCGCCCCATCTGATGATGCTGACCTTGTGGTTCCGGGCCCCCTTCTTCAGA  
GATTACATCATGTCTGCAGGGTTGGTCACATCAGAAAAGGAGAGTGCTGCTCACATTCTGAACAGGAAGGGT  
GGCGGAAACTTGCTGGGCATCATTGTAGGGGGTGCCAGGAGGCCCTGGATGCCAGGCCTGGATCCTTCACG  
CTGTTACTGCGGAACCGAAAGGGCTTCGTGAGGCTCGCCCTGACACACGGGGCACCCCTGGTGCCAATCTTC  
TCCTTCGGGGAGAATGACCTATTTGACCAGATTCCCAACTCTTCTGGCTCCTGGTTACGCTATATCCAGAAT  
CGGTTGCAGAAGATCATGGGCATCTCCCTCCCACTCTTTCATGGCCGTGGTGTCTTCAGTACAGCTTTGGT  
TTAATACCCTACCGCCGGCCCATCACCAGTGTGGGGAAGCCCATCGAGGTACAGAAGACGCTGCATCCCTCG  
GAGGAGGAGGTGAACCAGCTGCACCAGCATTATATCAAAGAGCTGTGCAACCTCTTCGAGGCCACAAACTT  
AAGTTCAACATCCCTGCTGACCAGCACTTGGAGTTCTGCTGA (SEQ ID NO:15)

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FIG. 9

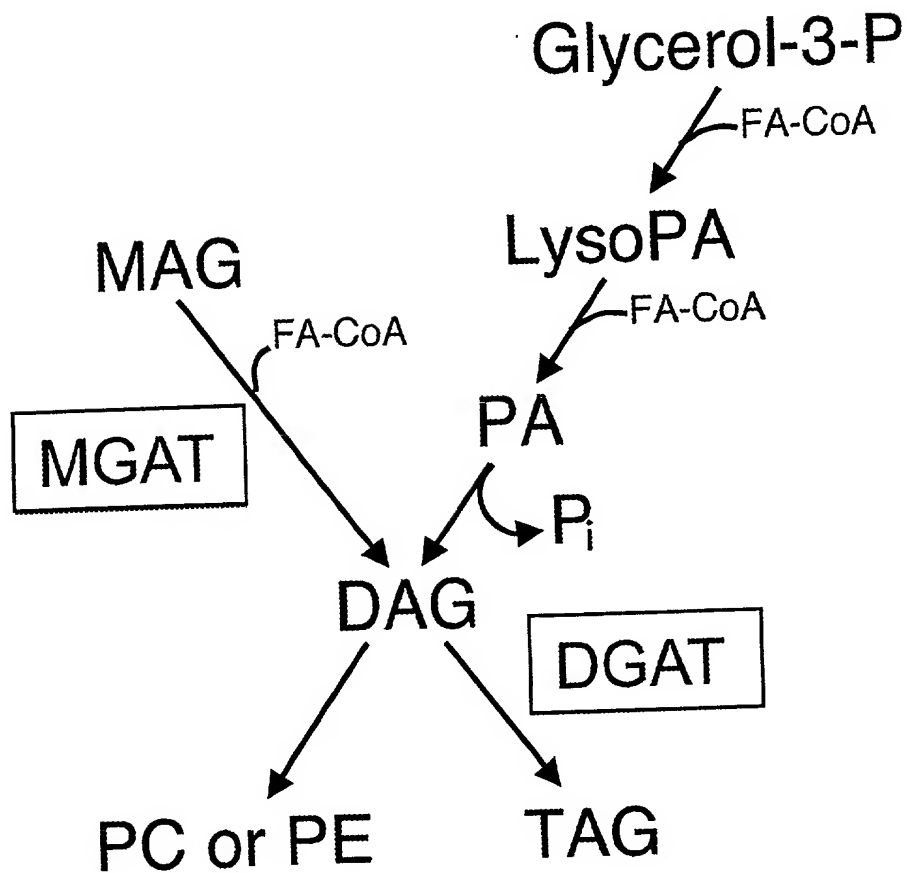


FIG. 9

## FIG. 10A

mMGAT1 MMVEFAPLN-----TPLAR-----  
mDGAT2 MKTLIAAYSGVLRGERRAEAAENSENKNKGSALSREGSGRWGTGSSILSALQDIFSVTWLN  
\* . : \* . . : . : \*

mMGAT1 -----CLQTAAVLQWVLSFLLLQVVCIGIMVMLVLYNYWFLYIPYLVWFYDWRTPQQG  
mDGAT2 RSKVEKQLQVISVLQWVLSFVLGVACSVILMYTFCTDCWLIADVLYFTWLAFDWNTPKKG  
\* . : \* \* \* \* \* : \* . : \* : . : \* : : \* : \* : \* : \*

mMGAT1 GRRWNWVQSWPVWKYFKEYFPICLVKTQDLDPGHNYIFGFHPHGIFVPGAFCN[F]CTKYSD  
mDGAT2 GRRSQWVRNWAVWRYFRDYFPIQLVKTHNLLTTRNYIFGYHPHGIMGLGAFCN[F]FSTEATE  
\* \* : \* : . : \* : \* : \* : \* : \* : \* : \* : \* : \* : \* : \* : \*

mMGAT1 FKKLFPGFTSYLHVAKIWFCFPLFREYLMSNGPVSVSKESSLHVLSKDGGG[F]VSIIVLGG  
mDGAT2 VSKKFPGIRPYLATLAGNFRMPVLRREYLMSGGICPVNRDTIDYLLSKNGSGN[F]AIIIVVGG  
\* . \* \* \* : . \* . \* : \* : \* \* \* \* . \* . : : : : \* : \* : \* : \* : \*

mMGAT1 AKEALEAHPGTFTLCIRQRKGFVKMALTHGASLVPVFSFGENDLYKQINNPKGSWLRTIQ  
mDGAT2 AAESLSSMPGKNAVTLKNRKGFKLALRHGADLVPTYSFGENEVYKQVIFEEGSGWRWVQ  
\* \* : \* : . \* . : : \* \* \* \* : \* \* \* . \* \* : \* \* : \* \* : \* \* : \* \* \* \* \*

mMGAT1 DAM[D]SMGVALPLIYARGIFQ-HYFGIMPYRKLIYTVVGRPIPVQQILNPTSEQIEELHQ  
mDGAT2 KKFQKYIGFAPCIFHGRGLFSSDTWGLVPYSPKITTTVGEPITVPKLEHPTQKDIDLYHA  
\* : . : \* . \* : : \* \* : \* . : \* : \* \* \* \* \* \* \* \* : : \* : \* : \* : \*

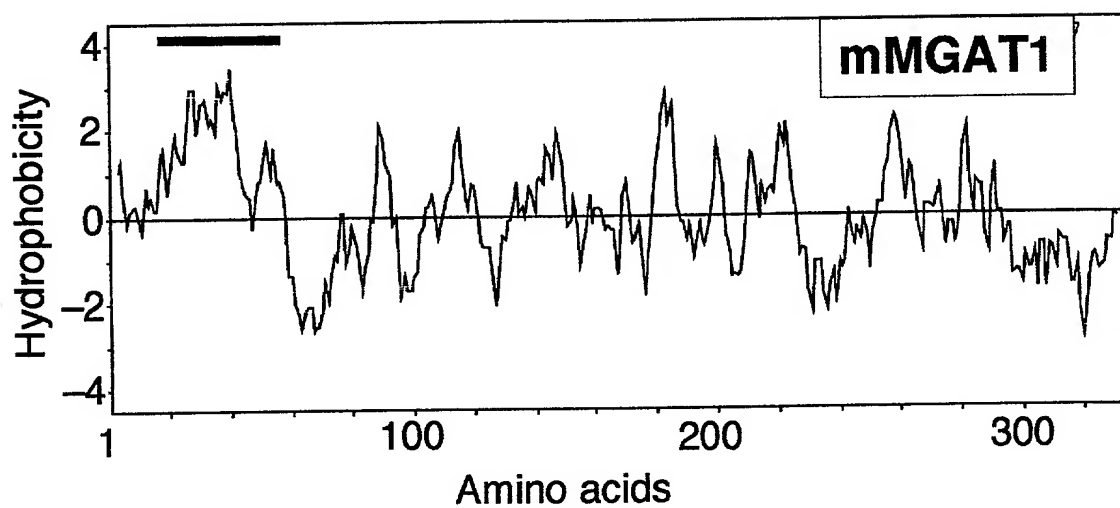
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\* : \* \* \* \* : \* \* \* : \* : \* \* \* \* . \* . :

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and Methods of Use Thereof"  
(19) Drawing pages

FIG. 10B



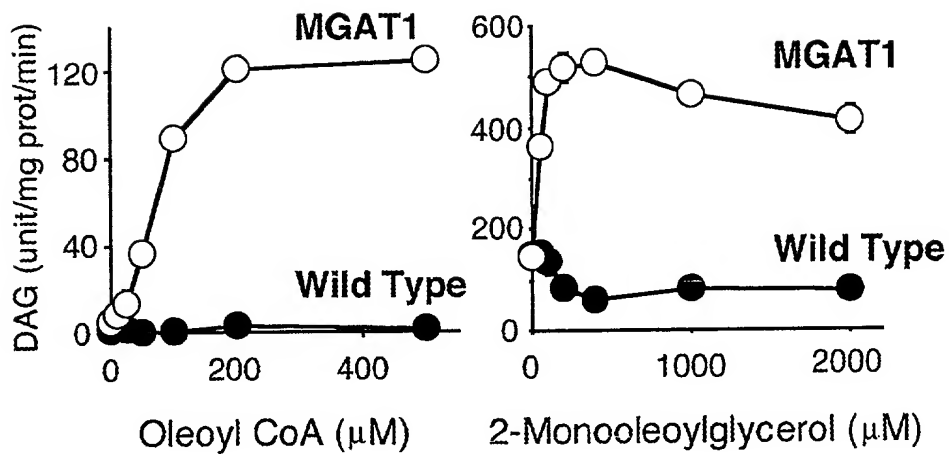


FIG. 11

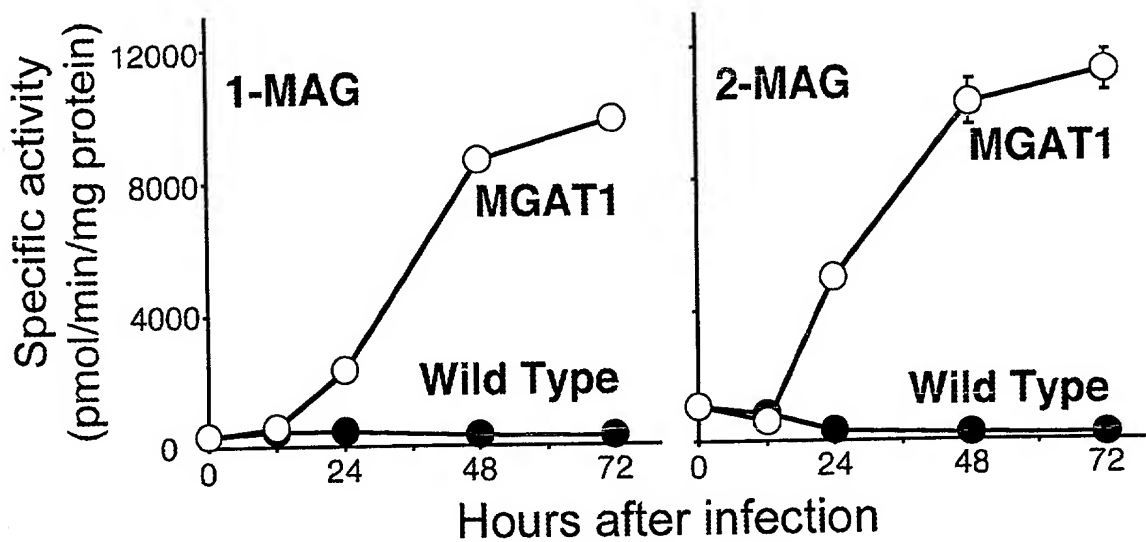
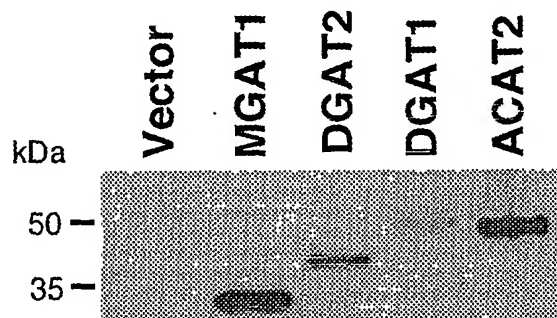


FIG. 12

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FIG. 13

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FIG. 14

